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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,590	09/12/2003	Hirotsugu Kato	008312-0305943	7876

909 7590 04/25/2007  
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EXAMINER
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PATEL, NIRAV B

ART UNIT	PAPER NUMBER
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2135

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/660,590

Applicant(s)

KATO ET AL.

Examiner

Nirav Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2007 (Amendment).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 3-5, 7-9, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 7-9, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's amendment filed on February 01, 2007 has been entered. Claims 1, 3-5, 7-9, 11 and 12 are pending. Claims 2, 6 and 10 are canceled by the applicant and claims 1, 3, 5 and 9 are also amended by the applicant

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (US Pub. No. 2002/0114466) in view of Go et al (US Pub. No. 2001/0037452) in view of Nagai et al (US Patent No. 6,938,162) and in view of Weidong (US Patent No. 6,819,766).

As per claim 1, Tanaka discloses:

a first transmitter configured to transmit encrypted contents to which link information is added [Fig. 5, paragraph 0089 lines 9-11, paragraph 0091 lines 1-2, paragraph 0093 lines 1-3]; a second transmitter (i.e. license server) configured to transmit to a communication network a key/license [paragraph 0186 lines 8-10], the key/license being transmitted based on uplink data which is generated using the link information

transmitted by said first transmitter and is input via the communication network [Fig. 7, paragraph 0094, 0114-0117]; said first transmitter includes a divider block configured to divide given contents into data units having a prescribed amount of data [Fig. 5], a processor block configured to execute encryption processing against each of the divided data units using different encryption keys [Fig. 5, paragraph 0095-0097], a first adder block configured to add information (e.g. initial vector IV, seed) to each of the encrypted data units [Fig. 5], a second adder block configured to add the link information to encrypted contents obtained by sequentially continuing the encrypted data units [Fig. 5, paragraph 0091 lines 1-2, paragraph 0093 lines 1-3, Fig. 46, paragraph 0098], each of the encrypted data units having said information (e.g. IV and seed) [Fig. 5].

Go discloses the second transmitter configured to transmit to a communication network an encryption key usable for decrypting the contents transmitted by said first transmitter [Fig. 1 paragraph 0017 lines 1-5].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Go with Tanaka, since one would have been motivated to prevent unauthorized contents usage [Go, paragraph 0069 lines 3-4].

Tanaka and Go do not expressively mention the key corresponding to the other time information.

Nagai discloses the second transmitter configured to transmit to the communication network, other time information for specifying the data unit of the encrypted contents being transmitted by said first transmitter [Fig. 20, col. 27 lines 50-59], the key

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corresponding to the other time information [Fig. 23] and the time information indicating reproduction timing [col. 28 lines 13-25].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Nagai with Tanaka and Go, since one would have been motivated to prevent the unauthorized reproduction of the digital content [Nagai, col. 31 lines 19-20] and prevent unjust digital copying for the digital content [Nagai, col. 3 lines 52-54].

Tanaka teaches adding the information (i.e. initial vector) to the each of the encrypted data units (i.e. blocks) [Fig. 5, paragraph 0095]. Tanaka doesn't expressively mention the information (i.e. initial vector or IV) is time information.

However, Weidong teaches that the initial vector is time information [col. 7 lines 36-38, col. 4 lines 66-67, col. 5 line1].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Weidong with Tanaka, Go and Nagai, since one would have been motivated to ensure the security of the data [Weidong, col. 1 lines 15-16].

As per claim 3, the rejection of claim 1 is incorporated and Nagai discloses:

said second transmitter is provided with a memory configured to record the other time information and the encryption key such that the recorded other time information corresponds to the recorded encryption key [Fig. 20, 23].

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As per claim 5, Tanaka discloses:

a recorder unit configured to store encrypted contents as well as link information [Fig. 3 step S4]; a transmission unit configured to transmit uplink data to a communication network and said uplink data being generated based on the link information stored in the recorder unit [Fig. 7, paragraph 0114-0115]; storage block configured to store the link information as well as the encrypted contents obtained by executing progress [Fig. 3, 5]; second transmitter (i.e. license server) configured to transmit to a communication network a key/license [paragraph 0186 lines 8-10], the key/license being transmitted based on uplink data which is generated using the link information [Fig. 7, paragraph 0094, 0114-0117].

Go discloses said uplink data requiring an encryption key for decrypting the encrypted contents; and a decryption unit configured to decrypt the encrypted contents stored in the recorder unit using the encryption key, said encryption key being obtained from the communication network using said uplink data [Fig. 1 paragraph 0017 lines 1-5, Fig. 8].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Go with Tanaka, since one would have been motivated to prevent unauthorized contents usage [Go, paragraph 0069 lines 3-4].

Tanaka and Go do not expressively mention the key corresponding to the other time information.

Nagai discloses the second transmitter configured to transmit to the communication network, other time information for specifying the data unit of the encrypted contents being transmitted by said first transmitter [Fig. 20, col. 27 lines 50-59], the key

corresponding to the other time information [Fig. 23] and the time information indicating reproduction timing [col. 28 lines 13-25].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Nagai with Tanaka and Go, since one would have been motivated to prevent the unauthorized reproduction of the digital content [Nagai, col. 31 lines 19-20] and prevent unjust digital copying for the digital content [Nagai, col. 3 lines 52-54].

Tanaka teaches adding the information (i.e. initial vector) to the each of the encrypted data units (i.e. blocks) [Fig. 5, paragraph 0095]. Tanaka doesn't expressively mention the information (i.e. initial vector or IV) is time information.

However, Weidong teaches that the initial vector is time information [col. 7 lines 36-38, col. 4 lines 66-67, col. 5 line1].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Weidong with Tanaka, Go and Weidong, since one would have been motivated to ensure the security of the data [Weidong, col. 1 lines 15-16].

As per claim 9, it encompasses limitations that are similar to limitations of claim 5. Thus, it is rejected with the same rationale applied against claim 5 above.

3. Claims 4, 7, 8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (US Pub. No. 2002/0114466) in view of Go et al (US

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Pub. No. 2001/0037452) in view of Weidong (US Patent No. 6,819,766) in view of Nagai et al (US Patent No. 6,938,162) and in view of Ozaki et al (US Patent No. 6,487,543).

As per claim 4, the rejection of claim 1 is incorporated and Go teaches a satellite broadcasting [paragraph 0165 lines 6-7] and IP communication over the Internet [paragraph 0046].

Ozaki discloses:

said first transmitter is provided for a broadcasting station, and said second transmitter is provided for a server to be connected to an Internet serving as said communication network [Fig. 1, 21, col. 6 lines 8-20].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Ozaki with Tanaka, Go, , since one would have been motivated to prevent unauthorized contents usage and distribute the content securely [Go, paragraph 0069 lines 3-4].

As per claim 7, the rejection of claim 1 is incorporated and Ozaki teaches:

an operation part configured to display on a display screen one or more titles corresponding to the encrypted contents stored in the recorder unit, said titles displayed on the display screen being selectable [Fig. 21 or 23, col. 17 lines 55-62, col. 18 lines 1-5].

As per claim 8, the rejection of claim 7 is incorporated and Ozaki teaches:



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a display part configured to display an operation screen for requiring at least one of a playback, stop, pause, and special playback, with respect to the encrypted contents corresponding to the title selected by said operation part [Fig. 21 or 23, col. 17 lines 55-67].

As per claim 11, the rejection of claim 9 is incorporated and it encompasses limitations that are similar to limitations of claim 7. Thus, it is rejected with the same rationale applied against claim 7 above.

As per claim 12, the rejection of claim 11 is incorporated and it encompasses limitations that are similar to limitations of claim 8. Thus, it is rejected with the same rationale applied against claim 8 above.

### **Response to Argument**

4. Applicant's arguments filed February 1, 2007 have been fully considered but they are not persuasive.

Applicant argues that:

Neither Tanaka nor Go nor Weidong nor Nagai show or for that matter describe any equivalent structure of process concerning time information, indicating reproduction

timing, added to each of the encrypted data units, as claimed in independent claims 1, 5 and 9.

Examiner disagrees with applicant's remark and still maintains that:

Tanaka teaches the configuration of content-exchanging system, which includes a content server, a license server as shown in Fig. 1. The content server provides contents to the client and license server provides the client with license required for using content provided by the content server. Fig. 5 is a diagram showing the format of the content received by the client from the content server. As shown in fig. 5, a data portion of the format comprises any arbitrary number of encrypted blocks. Each of the encrypted blocks comprises an initial vector IV, a seed and encrypted data. The initial vector IV and the seed vary depending on the encrypted block [paragraph 0095-0097, Fig. 5]. Weidong's invention relates to an improvement in computing systems, which manage keys for encrypted data. Fig. 1 shows data encryption mechanism, which utilizes the initial vector (IV) and generates the encrypted data. The initial vector is a combination of other information (e.g. time stamp/time information) [col. 7 lines 31-38]. Nagai teaches a key issuing center apparatus as shown in Fig. 20, which stores the time limiting information and transmits a key corresponding to time limiting information to the cipher decoder of the CATV decoder for decryption process [col. 27 lines 28-67, col. 28 lines 1-25, Fig. 20]. Go teaches the key server, which accumulates contents keys for decrypting the contents supplied from the contents server to the user computer and in response to a request form the user, supplies a relevant contents key to the personal computer [paragraph 0017 lines 1-5]. Therefore, combination of Tanaka, Go,

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Nagai and Weidong teaches the claim subject matter. Furthermore, the examiner recognizes that obviousness can only be established by combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F. 2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ 2<sup>nd</sup> 1941 (Fed. Cir 1992). In this case, the combination of Tanaka, Go, Nagai and Weidong teaches the claim limitation and the combination is sufficient.

### Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tagawa et al (US 7096504) --- Distribution system, semiconductor memory card, receiving apparatus, computer-readable recording medium and receiving method

Osaka et al (US 6970848) – Method for authenticating users

Takao et al (US 6954795) --- Transmission/Reception system and method for data broadcast and transmission apparatus for data broadcast

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

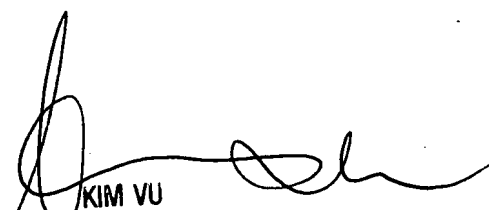
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirav Patel whose telephone number is 571-272-5936. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

*NBP*

4/19/07



KIM VU  
SUPERVISORY PATENT EXAMINER  
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